



## **Building Operator Certification (BOC®) Energy and Cost Savings**

The energy savings attributable to BOC-trained operators have been carefully documented in independent, third-party evaluations conducted on the BOC program throughout the nation, available for download at: <a href="http://www.boccentral.org/content/energy-savings-evaluation-reports">www.boccentral.org/content/energy-savings-evaluation-reports</a> and <a href="http://www.theboc.info/w-energy-savings.html">www.theboc.info/w-energy-savings.html</a>.

A 2012 evaluation of the Illinois BOC program and 2011 evaluation of the Minnesota BOC program, both performed by Navigant Consulting, determined the energy savings attributable to the BOC program and excluding measures rebated by other energy efficiency programs to be:

| BOC Program<br>Evaluation | Sample<br>Size | Avg Sq Ft<br>of Sites | Sample Savings/<br>Participant |    |        | Sample Savings/<br>Participant/ Sq Ft |       |        |
|---------------------------|----------------|-----------------------|--------------------------------|----|--------|---------------------------------------|-------|--------|
| Evaluation                | (Sites)        |                       | kWh                            | kW | Therms | kWh                                   | Watts | Therms |
| Illinois (2012)           | 43             | 508,100               | 181,000                        | 37 | 557    | 0.374                                 | 0.075 | 0.001  |
| Minnesota (2011)          | 50             | 194,500               | 42,936                         | 11 | 2,276  | 0.237                                 | 0.061 | 0.013  |

Using weighted average commercial sector energy prices for the Midwest and the Illinois BOC program energy savings, the equivalent cost savings for various sized facilities are as follows:

| Evaluated Energy<br>Savings/ BOC-<br>Operator/ Sq Ft |        | Area<br>Maintained by<br>Operator | Total Energy<br>Savings/ BOC-<br>Operator |        | Commer<br>Prices ( | d Average<br>cial Sector<br>Midwest<br>ion)* | Total Cost<br>Savings/ BOC-<br>Operator |        |
|--|--------|-----------------------------------|---|--------|--------------------|--|---|--------|
| kWh  | Therms | Sq Ft                             | kWh                                       | Therms | \$/kWh             | \$/Therm                                     | \$                                      |        |
| 0.374  | 0.001  | 50,000                            | 18,700                                    | 50     |                    | 0.8135                                       | \$                                      | 1,731  |
|  |        | 100,000                           | 37,400                                    | 100    | 0.0904             |  | \$                                      | 3,463  |
|  |        | 200,000                           | 74,800                                    | 200    | 0.0904             |  | \$                                      | 6,925  |
|  |        | 300,000                           | 112,200                                   | 300    |                    |  | \$                                      | 10,388 |

\*Derived from EIA sales and pricing data

BOC is a program of the Midwest Energy Efficiency Alliance. For more information on BOC, please visit <u>www.boccentral.org</u>.